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THE TROUT-FISHINGS OF LOCHLEVEN.

By R. Burns Begg.

Lochleven derives its widespread popularity as 'the happy hunting-ground' of Scottish anglers both from its local position and from its natural character. Situated within rapid and easy reach of our chief commercial centres, it affords a convenient means for securing that brief occasional relaxation from business which, in these days of high pressure and activity, is becoming more and more one of the necessities of modern life. Viewed in this light, anglers could scarcely desire a more convenient or agreeable resort. Independent of sport, the scenery around, although neither bold nor striking in its aspect, is far from being devoid of beauty and interest, and it exhales the very atmosphere of rural repose. Few scenes could more effectually tend to diffuse the complex and varied feelings of human nature over a wider, smoother, or more placid surface. Afloat on the waters of the loch, the angler can in one sweeping glance survey the sunny slopes of the verdant Ochils, the rugged fronts of the Lomond Hill and Benarty, and the long fertile and well-wooded strath extending towards Stirling with the Cleish Hills in mid-distance. Nor are the more immediate surroundings lacking in interest and attraction. In the centre of the loch nestles the hoary and picturesque ruin within whose walls the unfortunate Mary Stuart upwards of three centuries ago passed the first year of her lengthened captivity; while on the flat low-lying island of St Serf's, situated near the eastern extremity of the loch, there are still to be seen the ruined walls of the once important Priory in which Andrew de Wyntoun, nearly two centuries previously, penned his well-known *Cronykil of Scotland*. Kinross House, too, with its luxuriant woods, and the old county town of Kinross hugging the very margin of the water, impart to the scene a variety which tends to link the realities of to-day with the dim and hazy reminiscences of the past.

It is, however, neither with the picturesque beauties of Lochleven nor with its historical associations that we have here to deal; we propose rather to regard its attractiveness from a purely piscatorial point of view, and to treat of its merits simply and solely as a Brobdingnagian fishpond. It would indeed be difficult to find within the limits of the United Kingdom a sheet of water of equally large extent possessing greater fish-producing capabilities or affording better facilities for the sport of angling. Throughout its whole superficial area of from six to seven square miles, its basin, with the exception of a very limited portion to the south of St Serf's Island where the soundings are stated at upwards of eighty feet, is remarkably flat and uniform in its formation, the depth seldom exceeding twelve or fifteen feet; while the greater part is only from six to ten feet in depth. The bottom consists partly of shingle and partly of alluvial deposit, coated over with 'rannoch,' which during the summer months throws up its long green tendrils to the very surface of the water. The gently varying depth of the water affords unlimited scope for the angler; and in suitable weather, the long, far-reaching stretches of from six to ten feet in depth, which extend all along the eastern portion of the loch, seldom fail to yield excellent sport. Another circumstance which materially tends to maintain the productiveness of the loch is the fact that it belongs exclusively to one proprietor, Sir Graham Montgomery, who likewise owns almost the whole of the land by which it is surrounded. By this means uniformity of management is secured, and a fostering policy is rendered practicable—desiderata of the very utmost importance in the treatment of all angling waters.

Lochleven is a purely fresh-water lake, and so far as available to trout, it possesses no means of communication with the sea. Its sole outlet is the river Leven, which, starting from the south-eastern extremity of the loch, winds through Fifeshire until it empties itself into the Forth at the town of Leven. This stream may at some

remote period have afforded a means by which the fish of Lochleven might pass to and from the sea; but if so, it has for centuries back been rendered impassable by the obstructions both natural and artificial which have in the course of time become established all along its course. The denizens of the loch consist of trout, pike, perch, and eels. Each of these widely varying species attains to abnormal size in its waters, owing to the varied, abundant, and nutritious food which these supply. Trout have been occasionally caught weighing ten pounds and upwards; while the average weight is generally about one pound for each trout. Pike have been caught upwards of forty pounds in weight, while others of from twenty-five to thirty pounds were not infrequent; but in recent years, owing to the exterminating policy which has been prudently adopted, the specimens which have been secured of this 'fell tyrant of the watery plain' have become both much fewer in number and less remarkable in size. The perch, too, have become both smaller and fewer than they were a quarter of a century ago. At that time it was not an unusual occurrence to secure a cart-load in the course of a day's fishing with the net; and on one occasion (1855) even two cart-loads were caught in one day. In 1872 and 1873 from 400 to 722 perch were caught from one boat by angling. Since then, the 'takes' of perch have gradually diminished, and the capture now rarely exceeds two or three dozen at a time. An attempt is at present being made to 'cultivate' the perch, as it is thought that its young fry forms suitable and nutritious food for the trout. Eels are also very abundant in the loch, and attain to a considerable size; indeed, it has been found that, owing to this very cause, their marketable quality is seriously and injuriously affected. The largest eel weighed not less than 8¼ pounds; while 1¾ pounds may be stated as a fair average weight for each fish. The eels are entirely caught in traps at the outlet from the loch; and on an average of eight years terminating with 1872, the annual 'take' was not less than 5600 pounds.

It is, however, in the trout of Lochleven that the interest of the angler entirely centres. These have long formed a prolific and inexhaustible subject for discussion both among scientific ichthyologists and less reasoning sportsmen. Not a few of the former have maintained, on apparently reliable physiological data, that the trout owe their well-known superiority over all other fresh-water trout to the fact that they form a distinct and unique species (*Fario Levenensis*), approaching in their peculiar organic formation more nearly to salmon than any other lake trout—the trout of the Lake of Geneva only excepted. It has also been maintained that there are several, or at least more than one distinct species of trout common to the loch; and undoubtedly few of its angling frequenters can have failed to be struck by the marked diversity in colour and shape which is often displayed by the trout forming an ordinary average basket. Both of these contentions are open to question; and by not a few experienced scientific authorities the diversity both in organic formation and in outward appearance is regarded simply as the natural results of the rich, varied, and abundant character of the food on which the trout subsist. This forms an interesting problem for scientific anglers to solve. The superiority of the trout is, however, a fact which cannot be questioned. It is displayed in their exquisite symmetry of form as well as in their flavour and colour; and what is of greater importance to the angler, it is displayed still more in their pluck and never-failing determination to 'die game.' With a trout weighing a pound or a pound and a half on his hook, the angler has a highly exciting and engrossing piece of work in hand; and the heartfelt satisfaction with which he slackens his line and relaxes his mental tension the moment he sees his lively captive within the meshes of the landing-net, is a sensation which may well be gratefully remembered, but can never be verbally depicted.

The wonderfully prolific character of Lochleven may be demonstrated by a simple reference to the weight and number of trout annually taken from its waters. In a small work published in 1874, '*The Lochleven Angler*, by an ex-President of the Kinross-shire Fishing Club,' there is collected together, in a concise and thoroughly readable form, a mass of reliable information bearing upon this marvellous sheet of water; and among other details we find that, towards the beginning of the present century, when the trout were captured exclusively with the net, the annual take ranged from 26,474 pounds as a maximum in 1819 to 17,904 pounds as a minimum in 1821, the average weight from 1812 to 1821 being nearly 21,000 pounds annually. At this period the superficial area of the loch was about one-fourth greater than it is now, a considerable reduction in its depth, and consequently in its extent, having been effected in 1830 by the completion of an extensive drainage scheme, promoted for the purpose of improving the water-supply of the various public works dependent on the river Leven. An alteration of so sweeping a character could not fail to affect seriously the capabilities of the loch, and the annual 'takes' since 1830 fall considerably short of those already referred to. Thus, in the ten years from 1845 downwards, the annual 'take' by netting ranged from 15,273 pounds in 1847 to 5844 pounds in 1850; while the average over the whole period amounted to 11,000 pounds, or only 500 pounds more than one-half of the annual average during the pre-drainage period. At this time the net still continued to be the sole means of capture, and therefore the comparison between the average annual result of the two periods clearly shows that the reduction in the 'outcome' from the loch was disproportionately greater than the mere reduction in its superficial extent. Fortunately, the change led to no deterioration in the quality or size of the trout. On the contrary, they seem rather to have improved in both respects, for the flavour of the trout was never more generally recognised than it is at present, nor has their average weight ever ranged higher.

In 1855 a new era in the history of the loch

was suddenly inaugurated. In the summer of that year a notice of an exceptionally good basket of trout secured with the fly found its way into the public prints, and the result was an immediate rush of anglers from all quarters; and the success which as a general rule attended them dispelled the hitherto prevailing belief that the Lochleven trout would not rise to the fly. The loch became at once established as the first angling water in Scotland, and that character it has constantly maintained for the last thirty-five years, although the 'takes' during that period have been quite as fluctuating and varied as during the earlier period when netting prevailed. Taking the angling results of the last twenty years, we find that these range from a minimum of 3271 pounds in 1876 to a maximum of 21,073 pounds in 1888. The net is still used regularly during the earlier months of the fishing season, but only for the purpose of exterminating the pike; and the trout may now be said to be strictly and exclusively reserved for the angler's delectation.

The yearly fluctuation in the productiveness of Lochleven has always formed a puzzling and apparently insoluble problem, and legions of explanatory theories have from time to time been propounded by its most regular frequenters. At one time the falling-off is attributed to the 'open' character of the preceding winter; at another, to the drought during some previous spawning season; or to the winter floods having swept the unhatched ova from the 'redds' in the streams down to the stagnant water of the loch, where it was either devoured by its many enemies, or became a victim to 'un-ripening decay.' Now, it is the want of insect food on the surface of the water; and next year it may be the superabundance of 'bottom-feeding.' One angler is heard maintaining that the loch is over-fished, and that the trout is being exterminated; while another with equal force demonstrates that the water is over-stocked, and that the larger trout are simply gorged with the fry of their own species.

Whatever may be the real cause of the fluctuation, it certainly is of a very marked character; and—paradoxical as the statement may seem to be—it must be remarked that the most striking feature of the fluctuation is the wonderfully unvarying order of its variation. This is observable both in the netting and in the angling period, the takes in both instances fluctuating every four or five years with wonderful regularity from a minimum to a maximum, and *vice versâ*. This seems to indicate that the fluctuation in the aquatic harvest is attributable to the regularly recurring effect of some well-established and unvarying natural law. Meteorological data tend to show that our seasons favourable and unfavourable run more or less in cycles; and it would appear that a somewhat similar order of sequence regulates trout-fishing as well.

The angling season for the past year, which terminated with the last day of August, was an exceptionally unfavourable one. The 'takes' during the earlier months, when the weather was propitious, were unusually favourable, as contrasted with the previous ten or twelve years, the takes for April and May having amounted to nearly 6000 trout, or fully double the number caught during the same months in the year preceding. The falling-off, therefore, during the past season cannot be attributed to any reduction in the stock of trout, but seems rather to arise merely from subtle atmospheric influences. There are few lakes which are so susceptible of such influences as Lochleven. From its open and exposed situation, as well as from its extent and general uniformity in depth, it is extremely subject to atmospheric change. Each cloud that floats over its surface, and every breath that stirs its waters, varies its aspect; and in a summer so variable as that of last year, it can easily be understood by any one familiar with the habits and instincts of trout, how seriously their natural predilections may have been perverted. Sir Walter Scott, who was a frequent visitor to Lochleven, appears to have fully realised its peculiar variability; for in *The Abbot* we find Roland Græme, in the course of an angling excursion with George Douglas, giving petulant expression to his temporary pique against Catherine Seton, by likening her in the variableness of her humour to the waters on which they were then floating.

DUMARESQ'S DAUGHTER.

CHAPTER XIX.—A LITTLE CLOUD.

At Petherton the autumn and winter passed slowly away, and Psyche's heart gradually accustomed itself to its great sorrow. She was brave, and she stifled down her grief bravely. Haviland Dumaresq, watching her close, with his keen gray eyes and his eager glance, flattered his own soul (poor purblind philosopher!) that Psyche had forgotten all about that obtrusive painter fellow. Oh, wilful foolishness of parents who think such things. Your children's hearts veil their wounds from your eyes with sedulous care, and you say with a smile: 'All's well! I can see no scars anywhere.'

But Psyche herself—ah, how different there! She had never forgotten him; she could never forget him. It wasn't merely that she had dismissed to his death the one man she had ever loved. It wasn't merely that he had left her abruptly, and gone where communications with him were practically impossible. It wasn't merely that his life was in danger, and that he might never perhaps return to see her. Worse than all those, though all those indeed were bad enough, was the horrible, hateful, haunting consciousness that she had been forced to show herself in a false light to Linnell, and that if Linnell died on that forlorn hope, he would die believing her unutterably mercenary, and cruel, and selfish. To show one's-self in false colours to those one loves is inexpressibly painful. Her soul loathed the picture Linnell must have formed of her. It was torture to her to think he must go on so long mistaking so utterly her character and her feelings.

For Psyche had learned, three days later, on what dangerous errand her lover had started. She read the announcement casually in the *Athenæum*: 'Mr C. A. Linnell, the rising young painter, whose oriental subjects have attracted so much attention in the Grosvenor this year, has

accepted the difficult and somewhat thankless task of special artist to the *Porte-Crayon* with Gordon at Khartoum. He set out for his perilous post on Saturday last, in company with Mr T. A. Considine, the well-known correspondent of the *Morning Telephone*.' How bald and matter-of-fact the paragraph sounded, as it stood there among a dozen other indifferent scraps of gossip in the literary notes of the *Athenæum*: and yet, what a tragedy it meant for Psyche, who had driven him forth, perhaps to his death, and felt herself very little short of a murderess!

If only he could have known! If only he could have known! Her promise! Her promise! That fatal promise!

Restraining her tears with a deadly effort, she rushed up-stairs into her own room and locked herself in with all the impetuous sorrow of budding girlhood. Then she flung herself on her bed and gave free vent to her grief. She cried, and cried, and cried again, in a luxury of agony —till the hour for tea came, and she had to go down again.

But even so, she was Dumaresq's daughter. She rose, and bathed her face carefully. Her self-control was wonderful. It was with eyes scarcely red and with a cold proud air that she handed the paper across to her father with his cup of tea ten minutes later, and said in a voice hardly trembling with emotion: 'Mr Linnell's accepted a post in Africa now, you see, Papa.'

Haviland Dumaresq eyed her hard, and thought to himself with a smile of inward satisfaction: 'A mere light scratch! The first shallow love of childhood! Profound emotions preclude speech. Women, before their affections are fixed, are necessarily plastic. Unable to choose freely for themselves, like men, they can shift their emotions from object to object, or hold them in suspense, an affinity unsaturated, till the one man comes on whom to focus their regard permanently. She could never have felt the parting very much after all, or she couldn't talk as carelessly now as that about him.'

But in spite of philosophy, all through the autumn and winter months Psyche grieved silently, silently. Her sorrow was all turned in upon herself. She had no one to share it, no one to sympathise with her. Geraldine Maitland had gone with her parents for the season to Algiers: with Ida Mansel, that correct and cultivated Girtonian product, she had little in common; so she was left to brood over her great grief in solitude. Now, a sorrow turned inward is the most dangerous and insidious in its effects of any. The suspense and the isolation were wearing Psyche out. Only that unquenchable Dumaresquian spirit of hers enabled her to put so good a face upon it. But a Dumaresq suffers, and suffers in silence. Her father never knew how Psyche was suffering. With a brave heart she came down to breakfast each day as though she had not lain awake and cried all night: with a brave heart she took up the paper each morning to read afresh of new delays in the relief of Khartoum.

Everybody remembers that long-drawn period of horrible suspense, when a handful of brave Englishmen held out by themselves against tremendous odds in the doomed city. Everybody remembers the breathless interest of that painful drama, and the slow lingering despair of hoping against hope for the gallant souls locked up in Khartoum.

But to Psyche the suspense was more terrible than to any one; the despair was most poignant; the hopelessness most appalling.

She had sent Linnell to his death, she felt sure. He would die without ever knowing how profoundly she loved him.

Yet even so, she bore up like a Dumaresq. Her father should never know how she felt. At all hazards she would keep that terrible secret from him.

So night after night, as she lay awake and cried, she learned to cry silently, imperceptibly almost. It was not merely a sort of crying that made no noise: it was a sort of crying that let the tears trickle slowly out, one after another, without even so much as reddening the eyes and eyelids. She practised crying in this quiet way, deliberately practised it, like a Dumaresq that she was: and to such a pitch of perfection did she bring it at last, that even the tears themselves ceased to flow. She cried, as it were, all mentally and internally.

But her eyes ached horribly none the less for that. Bright and clear and beautiful as usual, they ached worse every day with that unnatural effort.

One evening in January, as the days were lengthening again, and Psyche was looking forward to the time when Geraldine, dear Geraldine, might return from Algeria to comfort her soul, Haviland Dumaresq came home from the village with a London newspaper, and handed it to Psyche to read aloud to him. That was an ordeal she had often to endure now. The papers breathed full of Gordon and Khartoum—fears for the besieged, hopes for the relievers—and Psyche, all tremulous, was compelled to read aloud in a firm clear tone those conflicting rumours, and pretend it meant nothing more to her soul than the meetings of Public Companies or the Sporting Intelligence. For with all his philosophy the philosopher had never mastered the simple fact that he was slowly killing his only child by unintentional cruelty. He was sure she'd forgotten that little episode altogether now. Khartoum was no more to her than Jerusalem or Jericho.

'We have all along counselled the Government,' Psyche read aloud, 'to adopt a more vigorous and aggressive attitude towards the tribes that still block or harass the passage of our forces up the bank of the river. Unless something is done within three months to relieve the garrison which now holds out'——

'Well?' Haviland Dumaresq murmured, looking up inquiringly as Psyche broke off in sudden bewilderment. 'What next, my child? Go on, won't you?'

'I—I don't know what next,' Psyche cried, faltering, and laying the paper helplessly on her knees. 'I don't quite see. I think—there's a sort of blur somehow across the printing.'

Haviland Dumaresq took the paper incredulously from her hands. He glanced with his cold unflinching eyes at the leader she had been reading so quietly and calmly. Nothing could be clearer or more distinct than its type. A sudden thought flashed across his brain for a moment.

Could Linnell by any possibility be mentioned in the article? Psyche had almost forgotten that foolish little love-episode by this time, of course: but the sudden sight of the painter's name staring her unexpectedly in the face from a public print might no doubt arouse for a second the latent cloud. Emotion dies and revives so strangely. He glanced down the column. No, nothing of the sort could he see anywhere. In a neighbouring column perhaps, then: among the telegraphic items! The painter might have escaped, or might have been killed, or rescued. He scanned the telegrams with an eager glance. Nothing there that cast any light upon the subject. 'You must be bilious, my child,' he said, with a searching look, handing her back the paper. 'Accumulation of effete matter uneliminated in the blood often gives rise to yellow patches floating before the eyes. Best relieved by exercise and fresh air. Go on now, Psyche, and read a little further, if it doesn't hurt you.'

What a blank page the human heart often shows to those who think they stand nearest and dearest of all to it! Exercise and fresh air, indeed, for a broken spirit! How little Haviland Dumaresq, in his philosophic isolation, knew what inward grief was eating away his Psyche's soul and undermining his Psyche's eyesight!

The trembling girl, all calmness without, took the paper back from his hands without a single word, and went on reading for some minutes longer. Then the letters on the page disappeared once more, as if by magic, and a vague nothingness swam a second time in the air before her.

'I can't read, Papa,' she cried, laying the swimming paper down in despair. 'The words all seem to fade into a blank before my eyes. I can see nothing. It's a sort of wandering haze. I don't think I can be very well this morning.'

'A yellow patch floating before your face?' Haviland Dumaresq asked with suggestive quickness. 'A sort of central glow or spot of fire, fading off at the sides into normal vision?'

'Oh no,' Psyche said; 'nothing at all of the sort. I've had that too: I know what you mean; but not lately: this is something ever so much deeper and more serious than that. It's a sort of cloud that rises up, I think, in my eye itself; and whenever it rises, I see nothing at all for a few minutes: the whole world seems to become a kind of mist or haze floating vaguely in dim outline in front of me.'

Dumaresq rose from his chair with great deliberation and moved to the window. 'Come here, my child,' he said with that gentle tenderness in his tone which he always displayed in talking to Psyche—for oh! how he loved her! 'Eyes are far too precious to be neglected with impunity. The more complex an organ, the greater the difficulty in re-establishing equilibrium once upset. Let me look and see if there's anything the matter with them.'

Psyche walked forward with uncertain steps, half feeling her way between the chairs and tables, in a manner that brought the old philosopher's heart into his mouth like a child's. Could anything be wrong, then, with his darling's sight? He held her upturned face gently between his palms, and gazed down with profound searching into those deep blue eyes. A cataract forming? No, nothing like that. 'The conjunctiva and cornea are perfectly normal,' he murmured with a sigh of distinct relief, for the bare suggestion of anything wrong with his Psyche's eyes had stirred him deeply. 'The lenses, too, seem absolutely right. If there's mischief anywhere, it must be deep down in the region of the retina itself. We'll test it carefully. But there's no hereditary predisposition to weakness of vision. Functional, functional; it *must* be functional. Your dear mother's eyes were as sharp as needles; and as for me, I can read the smallest print to this day, as you know, Psyche, at least as well as any man of twenty.'

He took down a book from the shelf at random and opened the title-page at three or four paces. 'Read as much as you can of that, my child,' he said, holding it up to her. Psyche read it without a moment's delay: 'Contributions to Molecular Physics in the Domain of Radiant Heat, by John Tyndall.' Her father's face lighted up with pleasure. 'Good!' he said, relieved, as his heart gave a bound. 'Try again, Psyche,' and he took down another. 'What's this?' he went on, walking a step or two across the room, and holding the title-page open once more before Psyche's eyes.

'The Fertilisation of Flowers, by Professor Hermann Müller,' Psyche read out slowly; 'then there's something I can't quite see; and after that I can make out plainly the two words "Charles Darwin."'

'With a preface by Charles Darwin,' her father said cheerfully.—'Come, come, Psyche, that's not so bad. There can't be much wrong with the retina, anyhow, if you can read like this at eight feet distance.'

Psyche sighed and held her peace. She knew the world had faded away suddenly before her eyes more than once of late, and she could hardly treat this discomposing consciousness as lightly as her father did. But if *he* was satisfied, all was well. For herself, she could bear it as she had borne what was so much harder and deadlier to bear than mere blindness.

Dumaresq gazed at her for a minute in silence. Then he said once more, 'Has this happened often?'

Psyche hesitated. She couldn't bear to grieve him. 'Once or twice, Papa,' she said after a brief pause. 'But it's nothing much; it'll go off soon—when the summer comes back to us.'

Dumaresq looked down at her with a satisfied air. 'No, it's nothing much,' he repeated. 'I know the human eye by this time pretty well. I made an exhaustive study of eyes, you know, when I was working up my second volume. If I saw the slightest cause for alarm in the case, I'd take you up at once to consult Critchett. But I don't see any. The cornea's normal; the retina's normal; and the power of vision is in no way defective. These occasional failures must be purely nervous. In girls of your age one must expect a certain amount of nervous abnormality. An incident of our civilisation; we expel Nature, as Horace says, with a fork, but Nature will always get the better of us somehow.'

Poor old man! With all his wisdom and all his power of generalisation, he never realised

the simple truth, that it was *he* who was trying to crush Psyche's nature, and that one way or other Psyche's nature would in the end prove irresistible.

(To be continued.)

THE MADEIRA OF THE PACIFIC.

THERE is an interesting speck of volcanic land rising from the waters of the ocean a few days' sail from Sydney, which has been aptly termed 'The Madeira of the Pacific;' and as it presents many features of interest, it may not be out of place to give a short description of it and of things pertaining to it.

Lord Howe Island, the official name of this 'gem of the sea,' distant and inaccessible as it may at first sight appear, is not really altogether out of the world, for it is but three or four hundred miles from Sydney, and of late has had regular communication with that city by means of the ketch *Mary Ogilvie*, which makes four voyages in the year between Sydney and Norfolk Island, calling at Lord Howe going and coming.

Lord Howe Island is situated about three hundred miles from Port Macquarrie. It is some five hundred west of Norfolk Island, and is the most southern of the islands on the east coast of Australia. Its length is between six and seven miles 'as the crow flies' (only there are no crows there), but is considerably longer if the curve of the land is followed; the average width is a mile, but is a great deal more in places.

The discovery of the island was made by Lieutenant Henry Ledgbird Ball on the 17th of February 1788, during his passage from Port Jackson (Sydney) to Norfolk Island. Mr Ball remained several days at the island; he gave it the title we know it by after the celebrated admiral, and also named the principal peaks, points, and ports around and upon it. He made a survey of the shore-line and of the adjacent islets and rocks, took soundings, and gave sailing directions for future guidance. Most of the names given by Lieutenant Ball have been retained—namely, Mounts Ledgbird and Gower, Points Phillip and King—after the first Governor and Lieutenant-governor of New South Wales—Prince William Henry Bay, &c.

The appearance of the island as it is approached is remarkable. Two round-looking knobs are first seen, at a distance of from forty to fifty miles, like separate isles rising from the water. As one gets nearer, these appear to be joined together, and to have a long flat stretch of ground attached to them, terminating in a lower mound. The general effect now is that of a camel crouching to receive its load. The two first-sighted prominences form the hind-quarters of the animal, and the small hill at the farther end of the island his head; whilst a line of low rocks stretching across the bay seems to be the cord or string attaching the head to the rump; a slight rise about the middle of the island seems to be the saddle ready for loading. A closer approach reveals a singularly beautiful outline. The two rises which were first seen turn out to be a couple of bold headlands at the south end, and are known as Mounts Ledgbird and Gower, rising in great inaccessible cliffs nearly three thousand feet high sheer from the sea. The head of the camel turns out to be North Ridge, and the centre rise Mount Lookout. All these, with two subsidiary prominences known as North Hummock and Intermediate Hill, form the backbone, as it were, of the island. The general effect as one casts anchor at the moorings is exquisite. The deep red and gray volcanic rocks of Mounts Gower and Ledgbird are intersected here and there by great dykes of intrusive basalt running like twisting ladders from base to summit. The hills at the north end, although lower, are not less abrupt; but through them all, and indeed upon any point giving the least foothold, patches of bright green vegetation give variety and contrast to the darker stony mass. Between the hills, the undulating country is thickly wooded, breaking off into flats stretching to the sea, sometimes wooded to the water's edge, at others ending in lower cliffs; while here and there bright green swards terminate in sandy beaches, hardly ruffled by the gentle heave of the waves within the reef-bound lagoon.

The plan or form of the island is that of a crescent; 'boomerang-shaped,' Mr H. T. Wilkinson appropriately terms it; nearly two-thirds of it on the concave side is protected by a fringing coral reef extending from Phillip Point to the foot of Mount Ledgbird. The North Peak rises precipitously in a rugged promontory some six hundred feet high, and round to the westward is a semi-isolated hill known as Mount Eliza. 'It has all the appearance of a conical hill cut vertically in half,' says Mr Etheridge, while 'Linnæus' says of it 'that it resembles a divided cone with a peaked top.' Along the sea-face are one or two water-washed caves.

A few ravines run from the higher lands to the sea; but the creeks are unimportant, as may be imagined from the small area of the island; fresh water, however, is abundant, and readily obtainable by shallow sinking.

There are some three thousand acres of land in the whole island, while two thousand of this would be capable of cultivation; but as a matter of fact, only a few hundred acres are in tilth. The principal crops are onions—the finest south of the line—bananas, sweet-potatoes, and maize. It is indeed from the export to Sydney of onions that the inhabitants of the island chiefly obtain their living; but there are abundant opportunities of increasing their means of subsistence, for there is hardly a fruit, vegetable, or flower grown throughout the temperate or semi-tropical regions of the world which would not flourish upon it.

The island was only occasionally visited from its discovery until 1834. Now and then, a party of whalers would land and refresh themselves with the easily-caught wild hens and indigenous fruits, or obtain from the lagoon boat-loads of the swarming fish; and sometimes would leave part of their crews there while they made short runs away. Some of these rambling visitors, indeed, performed acts which have left their marks on the island. They turned loose pigs and goats, and also, unfortunately, a lot of black domestic cats. All these animals throve; but the cats became a source of great mischief, almost

extinguishing the pretty and useful but very stupid wood-hen, as well as a curious bird like the guinea-fowl, and an elegant and gentle ground pigeon. The goats took to the mountains, and now afford excellent sport; and the pigs becoming masters of the thickets, prospered wonderfully, and are often killed of great size. Domestic pigeons and poultry were also turned loose, and became absolutely wild.

In the year 1834 a party of three New Zealand colonists, tempted by the accounts the whalers had given of this happy isle, determined to settle upon it. These men were named Ashdown, Bishop, and Chapman. They had with them three Maori women and two Maori boys, and made the passage across in the whaling barque *Caroline*, of which Captain Blenkinsop was master. They cleared some of the ground near the beach, built themselves huts of palm-boughs, planted sweet-potatoes, and lived comfortably by shooting and fishing. Shortly after this, it occurred to a Sydney merchant and ironmonger named Dawson that he might do well on the island; and accordingly he made arrangements to proceed there with a view to settling. He was accompanied by a certain Captain Poole, said to have been a military man; and these two bought out the original settlers, giving them three hundred and fifty pounds in all, of which sum Bishop and Chapman divided two hundred pounds, and, as he had made more extensive improvements, Ashdown took one hundred and fifty pounds. Poole remained on the island to represent his firm, and was joined by a Dr Foulis, who had bought half his interest. Ashdown, Bishop, and Chapman and their families then left.

Things appear to have gone on smoothly enough, and there is but little recorded of the doings of the islanders until 1843. A little vessel owned by Dawson, named *The Rover's Bride*, traded between Sydney and the island; but matters did not progress, chiefly owing to the settlers' want of energy in clearing and planting good land; they preferred to use the light and open sandy patches near the shore, instead of taking to the richer volcanic land, covered with timber and loose stones, which yields at present such bountiful crops, but is expensive and troublesome to clear and render fit for the plough. However, in the year last named an incident occurred which gives a picture of the half-barbarous, half-patriarchal manner in which the settlers dwelt and were governed, if government it may be called. At that time, Poole, who seems to have had the chief command of the islanders, had chained up to a tree a man named Moss. This unfortunate had escaped from a whaler which had put in for shelter; but he seems to have been of little use either aboard ship or ashore, and refused to do any work for his living; and to punish his idleness, Poole chained him up. One night, however, when the watch was asleep, Master Moss got free, and took to the bush. He subsisted for some time by stealing what he could, and on roots and birds; at the same time he managed to intimate to the settlers that he was desperate, and would revenge himself by burning down their huts and the store on the first opportunity. His threats created quite a panic, and caused a better watch to be kept over the premises than had been over the prisoner, for day and night some one was on the alert, and the buildings were surrounded with casks filled with water, to put out any fire which he might cause by throwing a lighted stick on to the roofs.

Some time afterwards, however, the fellow was captured; and this time a set of orthodox stocks was made and he placed in them; but such a method of confinement was too severe, and after some days of it, Poole, fearing the man would become a permanent cripple, adopted a different mode of captivity, one, indeed, which permitted of some change in position, but was hardly less terrible than the stocks. Poole got a large cask, and absolutely headed him in it, cutting a small and convenient! (so says the record) trap door in one end to admit a small vessel. Either Moss must have been a very small man, or the cask an exceptionally large one, for it is reported that he could either stand or lie down, having but these two positions to exist in. How he lived is a mystery; but after a time he and his cask—whether he was in it or not is not stated—were brought to Sydney, and Poole was also summoned thither. The latter was charged with 'the offence'—what offence the record does not reveal, but presumably an aggravated kind of assault, or false imprisonment—but, strange to say, the case was dismissed. Poole had, in fact, bought his enemy off, giving him ten pounds to stop the proceedings. This was not quite the end of it, for Moss made further demands on Poole; but was ultimately induced to leave the country upon receiving forty pounds more.

About the years 1846 and 1847, Dawson and his friends, finding the venture they had embarked upon not sufficiently remunerative, broke up their party. Most of the settlers returned to Sydney or New Zealand, and such as liked to remain worked on their own account independently. Subsequently, other arrivals, either by accident or design, augmented the population; but in 1869, at the time of an official visit of a police magistrate from Sydney, their numbers were but thirty-five, who were, with two exceptions, Europeans or Americans, the exceptions being South Sea Island women.

In 1882 a commission was appointed by the New South Wales Government to investigate certain alleged improper conduct of some persons on the island; and the Hon. Bowie-Wilson, the chief Commissioner, reported: 'With the inhabitants generally I have been most agreeably impressed, intelligent beyond their class, most exemplary in their conduct, and, considering their isolated position and few inducements for exertion, fairly industrious.' At present, the island has sixty-one inhabitants; but as no land can be purchased from the Crown, fresh settlers are not likely to arrive, and any increase in the number of these dwellers on the rocky isle must be from natural causes, and will—considering how few they are—be necessarily slow. The island is a portion of the territory of New South Wales, and has been proclaimed a strict reserve from sale or lease; but the titles of the people who had settled prior to 1882 to their holdings are respected. Hardly any govern-

ment, in the strict sense of the word, is required; but the visiting magistrate who goes to and fro settles disputes and makes inquiry into the well-being of the islanders. There is a very well conducted school under regulations of the New South Wales education department. The climate is exceptionally good. The thermometer never rises higher than eighty-two degrees Fahr. in summer, or falls below fifty-two in winter; but occasionally there are severe storms, which, however, do little damage, owing to the shelter the high hills give on the side opposed to the prevailing winds.

The vegetation is luxuriant and superb. It has been stated that 'there are probably few islands of similar size possessing so rich and varied a flora as Howe Island—handsome banyan and other trees, shrubs, palms, pandamus, and dwarf-ferns growing everywhere in great abundance and luxuriance.' The tree, indeed, of the island is the banyan. Mr Charles Moore, the Government botanist of New South Wales, says: 'The most remarkable plant, however, upon the island is a species of *Ficus*, and the only one of the genus found there. Along the whole extent of the flat and richest ground on the south-west side this noble tree grows in large numbers—very rarely in exposed situations—but marks distinctly an inner zone of vegetation, being protected on every side by belts of trees of various descriptions. It possesses to an extraordinary degree the branch-rooting characteristics of the famous banyan of India. From its high wide-spreading branches adventitious roots are produced, which descend to the ground; then rapidly enlarge, and become in the course of time huge stems, drawing nourishment from the earth for the support and increase of the parent branch, which, as it extends, produces similar root stems, the tree by this means covering a very large space of ground. In some instances the original stem had perished altogether, the branches becoming separate trees, each with numerous root-stems, and forming by the whole a beautiful amphitheatre of considerable dimensions.' There are four kinds of palms met with on the island.

It may be as well to mention here that the houses of the islanders are built of the stems of the palms, with two or three exceptions—where imported sawn timber and galvanised iron have been used—and are thatched on the roofs and walls with the leaves and fronds of the same plant. The thatching has a particularly neat and pleasing appearance.

Geologically, the island consists practically of two formations only, the volcanic rocks forming the general mass, and the stratified beds resting on them. The volcanic rocks occupy two-thirds of the island, comprising the great hills or mountains. The exposed sections as seen from the coast present a stratified appearance like rocks of sedimentary origin; 'but a close inspection shows them to be made up of different horizontal beds of volcanic rock.' These beds vary from fifteen to thirty feet in thickness. A variety of dykes and veins, a number of which are nearly vertical, run up the face of these magnificent cliffs. There are large masses of agglomerate rocks consisting of fragments of the volcanic series 'resting upon a vesicular and somewhat scoriaceous rock full of crystals.' The basalt was said to contain tin; but an exhaustive assay of many typical samples made in the Geological Laboratory in Sydney proved that this was not the case.

The loam which forms the alluvium is of rich character, 'being of a dark, unctuous, loamy nature largely impregnated with humus.' It varies in character, and assumes the aspect of calcareous sandy soil as it nears the coast; but generally it is extremely rich, and supports a most luxuriant vegetation. Decayed vegetable matter enters largely into its composition, which, combined with the volcanic products washed down from the hills, gives it almost the character of a hot manure-bed, upon which almost any kind of plant useful to man or good for food can be grown.

As to the fauna, a species of bat is the only example of lower mammalia captured. Mice, said to have been introduced from Norfolk Island, are now moderately common. During gales, the Australian species of seal has visited the shores. There are no snakes; but lizards are sparsely represented by the *Lacertilia*. Turtles now only occasionally frequent the island, although in former times they abounded. The birds are numerous, and generally very tame, so much so, that naturalists have found it difficult to get far enough away from some kinds to shoot them without blowing them to pieces! The sea-fowl are numerous, and lay vast quantities of eggs in the islets about the lagoon.

Fish are to be caught with the line in numbers, and generally resemble those of the Australian coast. Some thirty-five genera and nearly forty species have been named. Of these, the rock cod is common, and grows to a large size. There are also garfish, a species of herring, and some mullet. It is interesting to notice the occurrence of the common Australian eel, individuals of which have been caught up to six or seven pounds in weight.

Enough has now been written to prove how interesting, from every point of view, is our little 'gem of the sea;' and to those who have the means and time to embrace the Australian colonies in their globe-trotting rambles, let nothing persuade them to leave these regions without first visiting 'The Madeira of the Pacific.'

MY AUNT CECILIA.

CHAPTER IV.

My aunt was standing before the fireplace, her arms crossed upon the chimney-piece, and her head reclining on them. I could see that she was trembling violently, and there was a kind of passionate grief in her attitude which affected me very strangely. Captain Dundas stood beside her, in the stiff pose of a man who has started back from a position in which he had rather not be found.

'Aunt Cecilia,' I said, going towards her, 'what is the meaning of all this?'

There was no answer; so I turned to Captain Dundas, who had moved back at my approach.

He shook his head, and answering my look, he said: 'I can give you no explanation at all, Mr Winter. It is for your aunt to do that, if she chooses.'

'I think that is hardly sufficient,' I said. 'It appears to me that when an invited guest in my house claims a private interview with my aunt, and agitates her to the extent which I perceive, that I have a right to ask for an explanation.'

'I admit no such right,' he replied with increasing hauteur. 'There are special circumstances which you do not understand in this case.'

'But I intend to know them, Captain Dundas' (I was restraining my anger with some effort now); 'and unless you make me acquainted with them, I shall hold you responsible for the annoyance I see you have inflicted on this lady.'

'No, no,' my aunt interposed. 'He is not in fault, Osmond.'

I waited for a moment; but she did not continue her speech; and in fact she seemed incapable of doing so.

'I am at a loss,' I said. 'I am bound to accept my aunt's assurance, sir. But I may at least point out that your presence is distressing to her.'

He shrugged his shoulders. 'I am sorry to place you under the necessity of hinting that I should go,' he said. 'It was a *bêtise*.—Miss Cecilia, will you say "Good-bye?"'

Aunt Cecilia collected herself, drew herself up to her full height and gave him her hand without a word. He stooped and kissed it. Then I followed him down-stairs.

'Miss Winter is unwell, Sinclair,' he said, when we reached the garden; 'it would be inconvenient for us to stay.'

Then, with a distant bow, he strode down the garden path. Sinclair waited behind him for an instant.

'I can tell you nothing,' I said. And in another instant he, too, was gone.

When I returned to the drawing-room it was vacant; but our servant came to me. 'Miss Winter has gone to her room, sir; she wishes you to have your dinner; and if you are not going out, she would be glad to see you in about an hour.'

I went down to the dining-room, where the table was still laid for the party, of whom I was the only one to partake of the meal. I felt like some unlawful guest at a banquet, and one by one the delicate dishes which my aunt had made ready with such care went untasted away.

It was late in the evening when my aunt sent for me. I found her lying on her couch beside the fire, and it struck me with a sudden shock that she had grown very fragile in appearance. There was an odour of sal-volatile in the room, and her favourite well-thumbed copy of *The Saints' Rest* lay open by her side.

'Bring over that low chair, Osmond,' she said, speaking in her strong clear voice again.—'Have you had any tea?'

'I don't want any.'

She smiled and shook her head. 'I thought as much. And no dinner, I daresay. Well, we will have some tea now.'

She rang and ordered it. She hardly touched it herself; but every now and then I found her looking at me with a solicitude which I could not account for.

'Aunt Cecilia,' I said at last, 'if you have something painful to tell me, wouldn't it be better to get it over?'

'It would,' she replied—'much better; but I am only a cowardly old woman.'

'Well, what is this very dreadful thing?' I asked, feigning a cheerfulness which I could not feel.

'Give me my dressing-case,' said she.

I laid it on the table beside her; and from a drawer in it she took out a small leather case, much worn, which she handed to me.

'It is a portrait,' she said. 'See whether you recognise it, child.'

It was the face of a very lovely woman, in the spring-time of her beauty, before any shadow of care had fallen on it. Clustering golden curls fell round a complexion of the richest rose colour; the mouth was half opened by a smile, and the blue eyes positively danced with glee. And yet as I looked upon it another far different face grew out of the portrait; the fresh young features fell into lines, the smile faded, the golden hair was drawn back closely round the head; I seemed to hear a tearful voice cry passionately: 'Cecilia, Cecilia, he will forget me quite.'

'It is my godmother,' I said; 'but how changed!'

'Changed, indeed!' said my aunt sadly, taking the portrait from my hand; 'but not your godmother, Osmond. It is your mother's face—my dear, dear sister.'

'Aunt Cecilia!' I exclaimed, startled out of myself, 'you told me yourself my mother died before I could remember her.'

'I did, Osmond; but it was not true. You have no cause to be angry, child. I did it from a good motive; and I would have kept the story from you altogether if I could. But you would have suspected something after what you heard to-day. And after all, you will be a man soon, and in going about the world might hear the truth from other lips which would not tell it kindly.'

'For Heaven's sake, aunt, say what you have to say in as few words as you can.'

'Be patient with me, Osmond. The story is not long. Your grandfather, my father and your mother's, was the rector of ——, in the Isle of Wight. Your grandmother died when we were quite young. I was fifteen, Fanny (your mother) was a year younger. We had many friends, especially in Southsea, and very frequently one or both of us paid visits there. The house to which we went most often was that of the Whytes; you saw Henry Whyte this afternoon—he took the name of Dundas only a few years ago. If I had known that, I should have asked you to avoid him.'

'What has the man done?' I asked.

She shook her head. 'In the winter before I was nineteen your grandfather had a long illness; his chest was affected; and when the spring came he was ordered to the south of France to escape the cold winds. I accompanied him; but as our purses were slender, we left Fanny at home, and she was to stay with the Whytes

during our absence. During that time she became acquainted with James Winter.'

'My father?'

She nodded slightly. 'When I returned to England I saw there was a strong attachment. I did not like it. Your father held a good position in the Dockyard, and there was no apparent reason why they should not marry. The Whytes spoke well of him; my father liked him. I felt ashamed of my prejudice, but I could not conquer it. I used all my influence to delay the marriage; I implored your mother not to pledge herself until she knew more of him. It was no use: the marriage took place. For four or five years all went well. You were born, and Fanny was profoundly happy. Then my father died: that was the first gap in the circle. Fanny was angry with me because I would not live with them; but my old aversion was not dead, and I went to stay with the Whytes until I could form some plan for the future. Not long afterwards it began to leak out that there were large quantities of stores missing unaccountably from the Dockyard. Henry Whyte was at home: his ship had been paid off. He was in high favour with the Port-admiral, and made himself very active in the matter. He and your father met frequently at the Dockyard and had long consultations.' She stopped suddenly, her mouth twitching spasmodically.

'Osmond, Osmond!' she cried, 'can't you guess what I am trying to say?'

I knew; but I could not answer her.

'It was your unhappy father, child, who committed the frauds; and it was Henry Whyte who found him out.'

She lay still, not looking at me, after she said this, and only nodded when I asked if it was proved.

After a little while she reached out and took my hand in hers. 'Be a man, Osmond,' she said. 'What I have borne alone for twenty years you and I can bear together now. It is an old story, quite forgotten. No one will ever tax you with it.'

'You have not told me everything,' I said.

'After the trial,' she continued, pressing my hand when she saw how I winced at the word, 'it was necessary to decide what we were to do with Fanny and with you. Fanny loved your father more than ever; and she took a lodging near the prison, that she might be with him on the days when it was permitted. Then it came into my mind that if she would part with you, it would be possible to bring you up without this cloud upon your youth; that if I took charge of you it might even be kept from you altogether; while if you remained with your mother your father's crime must overshadow your whole life. I prevailed at length with your mother; but all our friends opposed my plan bitterly, and Henry Whyte quarrelled with me absolutely.'

'What right had he to dispute what you chose to do?' I asked hotly.

'Every right, Osmond; for I had promised to be his wife.—Don't speak of him any more, child; I would rather not.'

She lay quite silent for a long time. At last she turned and looked at me. 'You know now why you might not go into the navy,' she said.

. . . . . .

'Leave me now, Osmond,' said Aunt Cecilia. 'I feel very tired. Be a man, and look your trouble in the face. Trust me there is no sorrow which is too heavy to be borne. I am an old woman, and I speak of what I know.'

I went into my own room, and sat down beside the window, flinging it wide open, for there was something in my throat which stifled me. It was a cloudless night, full of stars. The air was occupied with the vague murmuring sounds of spring-time, while from the sea came a little restless wind, whispering I know not what in my ear, and cooling my forehead with its breath. At first I was like a man stunned with a sudden blow; but by degrees the serene stillness of the night restored me, and I began to think.

It was true what Aunt Cecilia had said—the story was so old that hardly any one could remember it. It was now for the first time that we had been confronted with any person who knew it—the only person in all likelihood who did. No one else, at all events, had such reason to recollect it. 'That might be,' something within me answered to this thought; 'but the humiliation comes from being brought into touch with crime. How can you forget that your father was a felon, tried and convicted?'

The cup was deep, and I drained it that night to the dregs. But at last the conviction stole upon me that the knowledge of this need not blight my life. I had still my future in my hands, to do with it as I would, to make my happiness, or to mar it, according as I was brave or weak. 'Look your sorrow in the face,' my aunt said. I did, and it receded from me. In its place came the thought of her great-heartedness. How many years she had endured this trouble in secret! From what source could she have gained the strength to give up home and love—everything she valued—for the sake of her sister and for me? At that moment I could have worshipped her as something almost more than human.

Day broke, and I had not slept. I went quietly down-stairs and let myself out of the house. There was a fresh wind blowing, and the sun was bright and joyous. The keen salt air braced my mind together with my body. I fell into a quick swinging walk, gaining strength at every stride. I must have travelled three miles before I stopped and sat down upon a rock from which the tide had receded.

Then a strange desire came into my mind to see Sinclair again; to know what he had to say to this—for he must know it; to hear his hearty voice assuring me that friendship stood high above all calamities of the world, like a beacon light which the winds and waves cannot reach. The grasp of a friend's hand would reassure me, his sympathy would cheer me. I rose and turned again towards the town, saying to myself that a friend whom I could trust was a gift direct from God. In my excited state I forgot that I had no cause to trust him.

The hotel was already open when I reached it, for by that time it was after eight o'clock. Several hostlers stood beneath the gateway, and I remember that a little Italian boy was there exhibiting a cage with white mice in it, and

talking to the hostlers in his half-intelligible broken English. They were laughing at him as I passed. I wondered at the time how the child had come to this little town, so far from the regular beat of strollers. He put himself in my way, and lifted up the corner of his box with a roguish smile, showing his white teeth. I gave him some small coin and passed by.

'Mr Sinclair,' said the waitress in the bar, in answer to my inquiry, 'left last night, sir, with Captain Dundas by the coach.'

I made some answer, I suppose, but I have forgotten. From that time I have neither seen nor heard of Sinclair.

. . . . . .

I have lost my Aunt Cecilia now; and I stand confronting my future life like a man cast out of an iron door, who hears the bars shot behind him, and sees the shadows falling deep and dark upon the heath in front. But the remembrance of my aunt's great love is with me like a lantern which will always guide my steps, and which no calamity can extinguish, nor can time ever dim its lustre.

THE STORY OF THE ENGLISH BIBLE.

THERE is no book in the world so widely read as the Bible; but how we came to have it in its present form is not so well known as it might be. Without going into the intricate history of the early texts, we will assume that the reader is acquainted with the fact that the Septuagint was the version of the Old Testament translated into Greek in the second century before Christ; that the New Testament books were written in Hellenistic Greek; and that both texts were subsequently translated into Latin. The Latin version, as revised by Jerome, is called the Vulgate, and was the authorised version of the Christian churches for more than twelve centuries.

The first complete translation of the Bible into the English tongue was effected by John Wyclif about 1380. This was the Lollards' Bible, and a large number of manuscript copies must have been written and circulated, for one hundred and seventy copies are still in existence. There were also many transcripts of certain books, as well as of the whole Bible. Wyclif could not go to the original texts, so he translated from the Vulgate, or accepted Latin version. It was not a perfect performance; but the Reformer was prevented by death from revising it, as he doubtless intended to do. The revision, therefore, was undertaken by John Purvey, and completed in 1388. It is curious that the whole of Wyclif's Bible was not printed as one book until 1850, when it was published under the editorial care of the Rev. Josiah Forshall and Sir Frederic Madden.

The language into which this, the first English Bible, was put was not the oldest form of our tongue, but what is known as Middle English. The grammatical structure is peculiar, and many strange combinations are used. Thus *en* is a common plural form—as *been* for bees, *kien* for cows, *izen* for eyes, *lamben* for lambs. *En* was also the common termination of verbs following a plural nominative, as *diden*, *seiden*, *founden*, *fledden*, *wenten*, *blameden*, *believeden*. Here is a fair specimen, taken from Matthew's account of the entry into Jerusalem: 'The disciplis *zeden* and *didden* as Jesus commanded hem and thei *brouzten* an asse and the fole, and *leiden* her clothis on hem, and *maden* hym sitte aboue, and ful myche puple *streweden* her clothis in the way, other *kittiden* braunchis of trees and *strewen* in the way, and the puple that *wenten* before and that *sueden*, *crieden*, and *seiden*, Osanna to the sone of Dauith.' 'Their' is always spelt 'her,' and 'them,' 'hem;' while for 'themselves' we find 'hem silf;' and for 'ourselves,' 'us silf.' The Wyclif Bible, indeed, is full of archaisms and of obsolete words. The two women at the mill appear thus: 'Twein wymmen schulen hem gryndynge in a querne, oon schal be taken and the tother left.' And this is how St John is made to finish his Gospel: 'There ben also many other things that Ihesus dide, whiche if thei ben writun bi eche bi hym silf, I deme that the world hym silf schal not take tho bokis that ben to be writun.' Leaven is called 'sourdough;' as, 'the kyndom of heuene is like to sourdough which a womman took and hid in three mesuris of mele til it were al sourid.' The Scotch word 'shog' appears in, 'Whanne the euenynge was come, he was there [on the hill] alone, and the boot in the myddil of the sea was *schoggid* with wawis.'

Wyclif's Bible, published in 1380, and Purvey's revised version of it, published in 1388, served until the dawn of the sixteenth century, when the Reformers began to think it time to take advantage of the newly-invented printing-press. But the language of Wyclif's translation had already become antiquated, and, moreover, copies of the Hebrew and Greek texts were now in the hands of English scholars. It occurred, therefore, to William Tyndale to prepare and print a new translation from the original texts. Tyndale was a scholar of both Oxford and Cambridge, and he was officiating as chaplain in the family of Sir John Walsh at Little Sodbury when he first formed the intention. He removed to London for the purpose of carrying it out, but found little encouragement there. At that time the Bible was an interdicted book in England; no scholar was allowed to publish and no person was allowed to peruse a translation, under pains and penalties, until the translation had been approved by the 'Council provincial.' Early in 1524, therefore, Tyndale went to Hamburg with ten pounds in his pocket; and a year later he sent the New Testament to press. It was being printed at Cologne, when it was interdicted. Tyndale hurried off with the papers and prints to Worms, where the work was continued and finished. The quarto edition of Tyndale's Testament, with 'glosses' or marginal notes, was published in 1526; and an octavo edition without notes was issued at the same time. Both editions were smuggled in large quantities into England, and quickly put into circulation. Tyndale's name did not appear on the title-page of either, and it was not then known who was the translator. He went on, between 1526 and 1533, translating and publishing the Pentateuch and the Book of

Jonah. In 1535 he was kidnapped at Antwerp, and carried off to Vilvorde, where he was tried and burned for heresy.

In working at his Testament, Tyndale had before him the Greek text, Luther's German translation, and the Latin Vulgate. He was well qualified for the task; and it has been said that his Testament is 'a noble translation, the basis of every subsequent English version, and on several accounts better than all subsequent versions.'

Eight editions altogether were published in Tyndale's lifetime, but some of these were without his supervision. One, especially, was edited by George Joye, who made several 'amendments' in the text, which Tyndale greatly resented. Another was published in what was intended to represent the Gloucestershire dialect, but which was really only a Welshman's notions of the dialect. Of the 1526 first edition, only three copies are now in existence as far as known—a quarto and two octavos. There is a wide difference betwen the language and rendering of Tyndale's Testament and Wyclif's Bible; but we have not space for the comparison. It may be mentioned, however, that such phrases as 'God forbid,' 'Would to God,' 'Bid him God-speed,' &c., which abound in the English Bible, are all of Tyndale's coining, although the literal renderings of the Greek text would give 'Be it not so,' 'I wish,' 'Say to him, hail,' &c. Such inversions of verb and nominative as in 'That which we have seen and heard declare we unto you,' are also Tyndale's; and it is noteworthy that many of Tyndale's renderings and homely phrases, rejected in the 'authorised version' of King James, have been restored in the 'revised version' of 1881. In fact, Tyndale's New Testament has never been superseded, only revised and amended, and is in substance that which is now in use.

The first complete Bible printed in English was issued in 1535 without any publisher's name. It was the work of Miles Coverdale, who incorporated, with revisions, Tyndale's books of the New Testament, of the Pentateuch, and of Jonah, and, for the rest, translated from German and Latin versions. It was thus only partly original, and in that part just a translation of a translation. No perfect copy of this Bible is known to exist. A copy sold a few years ago in London for one hundred and twenty pounds had the title, the first few leaves, and a map, in fac-simile.

Coverdale's Bible is called both 'the Treacle Bible' and 'the Bug Bible,' from two curious renderings. The passage in Jeremiah which we now read, 'Is there no balm in Gilead?' is rendered, 'Is there no more triacle at Galahad?' And in the Psalms, 'Thou shalt not be afraid of the terror by night,' reads, 'Thou shalt not nede to be afrayed for any bugges by night.' In the ninth Psalm, 'Put them in fear, O Lord,' is rendered by Coverdale as, 'Set a schoolmaster over them.'

Another version of the Bible, which appeared in 1537, is also sometimes called 'the Treacle Bible.' This was translated by 'Thomas Matthew,' a pseudonym of John Rogers, who was Tyndale's literary executor. It was not a new translation, but a revision of Tyndale's and Coverdale's versions. Meanwhile, one Richard Taverner, an excellent Greek scholar, was also engaged with an edition which was published in 1539. It is a scholarly work, but had little influence on subsequent versions.

Coverdale's second Bible, called 'the Great Bible' because of its portentous size, was issued about the same time as Taverner's. It was designed to supersede all previous editions; and as a second issue, in 1540, contains a long prologue by Cranmer, it has sometimes been called 'Cranmer's Bible.' The Great Bible was a revised version of Coverdale's former translation from the German and Latin, collated with the other translations that had been published in the meantime. A royal order was issued that this Bible should be set up in some convenient place in every church for free and public reading.

It will thus be seen that between 1535 and 1539 there were four separate versions of the Bible put before English readers—Coverdale's, Matthew's, Taverner's, and the Great Bible. Then there were reprints of these versions—such as Becke's and Carmarden's—which have sometimes erroneously been described as if they were new translations, when they were really unauthorised editions.

After the publication of the Great Bible there was a blank of twenty years, with the exception of a fragment of the New Testament translated by Sir John Cheke into 'Doric' English. Under Queen Mary, from 1553 to 1558, the reading of the Bible was prohibited by proclamation, and many of the Reformers fled abroad. Numbers of them gathered at Geneva, and it was there that 'the Puritan's Bible,' or 'Geneva Bible,' was prepared. The first instalment, a revised translation of the New Testament, was prepared by William Whittingham, and with a prefatory epistle by his brother-in-law, Calvin, was published at Geneva in 1557. For the first time in the English Bible the books were broken up into chapters and verses. This had been done before in Stephens' Greek Testament, and in some editions in German, but not till now in English versions. A second version of the Geneva Testament was issued in 1560, and a third in 1576. Meanwhile, Whittingham was engaged in a revision of the whole Bible, and is said to have been assisted both by Miles Coverdale and John Knox, both of whom resided at Geneva for a time. Doubtless he had other learned assistance as well; but not the less is the chief credit of the Geneva Bible due to Whittingham. It was published complete in 1560, well furnished with marginal notes, and in a cheap and handy form. It soon became a favourite, and was the version specially made use of by the English Puritans and the Scottish Covenanters. It remained in use in many places, especially in Scotland, long after 'the authorised version' was prepared by command of 'the most high and mighty Prince, James.'

The first Bible printed in Scotland—by Thomas Bassandyne in 1579, and known as the Bassandyne Bible—was the Geneva version. It was supposed to be taken from an authentic copy; but some curious misprints were discovered in the Geneva book, such as, 'Blessed are the place-makers' for 'peace-makers;' and some others.

The Geneva Bible is even now tolerably well known by the name of the 'Breeches Bible,' because of the rendering of Genesis iii. 7: 'They sewed figge tree leaves together, and made them-

selves breeches.' It is worth noting, however, that the word 'brechis' is also to be found in Wyclif's and Purvey's Bible; and that in one edition of the Geneva Bible, published by Lewis of London in 1577, 'breeches' is changed into 'apron.' There were three versions of the Geneva New Testament; but there was only one of the Old Testament, that in the Geneva Bible of 1560.

In 1564, the Anglican bishops resolved to prepare a version for themselves. The work was superintended by Archbishop Parker of Canterbury, who distributed portions among qualified divines for examination and revision. In four years the work was completed; and in 1568 the new translation, still known as 'the Bishops' Bible,' was completed. It was handsomely got up, with wood-engravings, a map of Palestine, an elaborate series of genealogical tables, and copperplate portraits of the Queen, Leicester, and Burleigh. It was never specially authorised by Queen or parliament, and the orders of Convocation for its use were only partially obeyed. A second edition was issued in 1569; and a third, with considerable amendments, in 1572. But it was never a great success, as it did not command the respect of scholars, and its size and price put it beyond the reach of the people. It is described as a work of unequal merit, but was really only a revision of the Great Bible.

The clergy of the Roman Catholic Church having set to work to prepare a version, they brought out in 1582 at Rheims an English translation of the New Testament; and in 1610, at Douai, an English version of the Old Testament, now known as 'the Douai Bible.' Like Wyclif's, these were translations of a translation, taken from the Latin Vulgate. The Douai Bible abounds in curious hybrid words which one never meets with anywhere else; but quite a large number of the readings and renderings of the Douai Bible were adopted by the revisers in 1881. They did not, however, adopt the variation of the 'treacle' rendering which the Douai revisers took, 'Is there no *rosen* in Galaad?' The Catholic version of the Bible now most commonly used in this country is one made by Dr Challoner in 1749 and 1750 of the Rheims New Testament and the Douai Old Testament. A revision of both was also made in 1783 by the Rev. Bernard MacMahon, with the approbation of Archbishop Troy of Dublin, and is known as 'Troy's Bible.'

These, then, were the various versions of the English Bible in use, or in existence, down to the close of the sixteenth century. With the beginning of the seventeenth century there arose a demand for a better translation than any yet in circulation, and when James VI. of Scotland succeeded to the English throne, he was supplicated to order a new translation. This was done, and is what we now call the Authorised Version. It is superior to the Great Bible, the Geneva Bible, and the Bishops' Bible—in spite of the respective merits of each of these. The King's Bible, or the National Bible, as the authorised version is sometimes called, was revised by forty-seven translators, divided into six companies, and the work occupied about three years. The new version was issued in 1611, and a second edition was required before the year was out.

The new Bible was translated from the original texts, and the diction of the Bishops' Bible was generally followed. Within thirty years after its production, a proposal was made, and repeated in Parliament, for its revision; and but for the sudden dissolution of the Long Parliament, it is not improbable that something would have been done in 1653.

Nothing was done, however, although demands continued to be made at intervals, and several private persons tried their hands at translations of portions of the Scripture, until the work was seriously taken in hand by the Convocation of Canterbury in 1870. Calling to their aid distinguished scholars from the different Churches of the United Kingdom and America, and apportioning the work, the New Testament was published in 1881, and the Old Testament in 1885—the one occupying ten and a half, and the other fourteen years. This, the 'revised version,' as we now call it, is based on the authorised version of 1611. The demand for the revised version of the New Testament in 1881 exceeded that for any other book that has ever been published before or since.

THE MONTH:

SCIENCE AND ARTS.

THE rapid progress which has lately been made in all manufactures which are connected with electric lighting was well seen in a small but most interesting Exhibition recently opened by the St Pancras Vestry, London. This vestry have resolved to retain in their own hands the supply of the electric current to the ratepayers under their jurisdiction, and the Exhibition was devised as a ready means of showing householders what could be done, and also as a medium of introduction between buyers and sellers of electrical fittings of all kinds. Electricity was exhibited here not only as a light-giver but also as a means of putting in motion rotary fans—which will probably in hot climates take the place of punkahs—sewing-machines, washers and wringers, boot-cleaning machines, and other labour-savers. We were somewhat interested in a new form of arc light shown here which has been devised for search-light purposes. The carbon pencils in this arrangement have between them a block of fireclay, which becomes incandescent when the current is applied. This addition not only secures steadiness of light, but causes the carbon pencils to consume at a much slower rate than is usual. The lamp is exhibited by Messrs Woodhouse & Rawson.

Although every one knows that electricity will give the most intense form of artificial illumination, it is not generally realised to what an extent this brightness can be carried. In the Exhibition above mentioned are shown some fluted carbon rods about two inches in diameter, which have been in use at St Catherine's lighthouse, on the coast of the Isle of Wight. These are lent for exhibition by the chief engineer to the Trinity House. They have been furnishing a light which is equal to that given by fifty thousand standard

candles. But the power of the lenses through which the light beam is cast over the sea condenses the actual light afforded into a ray equal in power to six and a half million candles.

We learn from a contemporary that another electrical triumph has been accomplished in London. When Mr Edison visited that city he inspected the great works of the London Electric Supply Corporation at Deptford, and expressed serious doubts about the success of Mr Ferranti's plan of conveying a current of ten thousand volts pressure into the heart of London. Mr Edison is an advocate of the low-tension system. High tension, however, has been demonstrated to be not only possible under such conditions, but to be a great success. At a recent general meeting of the company, Mr J. S. Forbes, the chairman, referred with excusable pride to the triumph the company had achieved. He pointed out that the prophets, or the majority of them, had predicted failure. The great concentric mains were conveying the current with the utmost ease, and none of the terrible evils that were predicted had shown themselves. The company are at present working up to a capacity of thirty thousand lights; and the great dynamos, capable of supplying other sixty thousand, are at present being adjusted before being set to work, so that in a short time this company will be supplying ninety thousand lights from a base seven or eight miles distant. One very remarkable fact was mentioned by the chairman—namely, that 'between the dynamo at Deptford and the transformer in the West End the loss of current is practically nil.' The question of the transmission of electricity over long distances for power and light is thus satisfactorily solved.

A new form of cart has been patented by Mr W. Hollingworth, of Eckington, its principal object being to render the work of haulage easier to the animal between its shafts. Its novel feature is a lever which is actuated by the horse in such a way that the weight of the load is shifted forward when going up-hill, or backward when descending any steep gradient. There is also an automatic brake attached to the vehicle.

Mr G. J. Symons, F.R.S., in referring to the extreme dryness of last February, writes that his meteorological observations have been continuous for more than thirty years, and that during that time the month of February has never been so free from rain as that of 1891. The amount recorded for that month, so far as it could be measured, is one-hundredth of an inch. There was a slight sprinkle of rain in London in the forenoon of the 7th of February, immediately after one of those intense darknesses which are becoming so frequent in the metropolis, and Mr Symons placed some sheets of note-paper in his garden so that the raindrops might make their own records. This they did in the form of inky markings upon the paper, which afford 'one more proof of the need for drastic measures if London is to be clean enough to live in.' It may be mentioned that from only one place in England did this observer receive a return which indicated more than 0·10 inch of rainfall, and that was from the hills above Ullswater.

Some Reports upon the use of oil at sea have lately been published in America, and from them it would seem that the masters of ships are keenly alive to the advantage of carrying oil in case of emergency, so convinced are they of its efficacy in making rough water smooth on the surface. Fish-oil is said to be the best to employ; but a combination of kerosene and linseed in one case gave valuable results. Quoting from these Reports, we find one from the chief officer of the brig *Marena*, who says that during a gale in January last the vessel was hove-to, and a hemp-canvas bag partly filled with oakum and saturated with oil was just allowed to dip into the sea from the lee quarter, the oil being replenished every two hours. 'As the vessel lay quite easy and shipped no heavy seas, it proved a great success.' The captain of the *Miranda*, a British steamship, speaks of oil having been used with most excellent effect in a gale which was encountered in December between St Johns and Halifax. 'Waves,' he writes, 'would come bearing down in the direction of the steamer as though to crush her; but they no sooner reached the oil than they rolled harmlessly past. To its use we owe our lives and the safety of the ship.'

The great severity of the cold last winter has raised the question whether fish suffer injury from being enclosed for long periods in solid ice. A correspondent of *Nature* quotes a case in which an icebag for application to an invalid's head had been filled in July from an icehouse which had been stored with ice the previous December. The ice was thus six months old, and yet, when the bag was emptied after use, a little fish was found swimming merrily about in the water which came from it. The ice had been originally gathered from a pond in the neighbourhood. Another correspondent of the same periodical, dating from a London suburb, writes that in a pond there several small carp and innumerable sticklebacks were embedded in the ice last December, and that when pieces of the ice were broken up and the fish placed in water they showed no sign of life. Seeing that these results are so at variance with one another, it would be interesting to institute experiments to settle the point. If fish can really be kept alive at a temperature below the freezing-point, a new industry might arise in the importation of Canadian salmon as palatable as that which is taken from our own rivers.

It is well known that a vast quantity of silver, gold, and platinum is used up yearly in photographic processes, and as only a small percentage of the salts of those metals assist in actually building up the pictures, the larger quantity is generally washed away and wasted. In large laboratories the residues are of course saved, and represent a very respectable sum of money annually; but it does not pay the small worker to be so saving of his wastes. Silver is still more largely employed than the other metals; but there is now an indication that photographers may presently be able to look to a far cheaper metal for their sensitive compounds. Mr F. H. Varley has discovered a means of associating salts of iron with suitable sensitisers, and of producing from them films quite as sensitive as those formed from gelatine emulsions which are used for instantaneous work. This cheapening of photographic processes will doubtless mark a new era in many of the numerous applications of the art to our manufacturing processes.

An interesting paper was lately read before the Society of Arts, London, on the subject of 'Electricity in Relation to the Human Body, its Dangers and its Uses.' The authors of this valuable paper pointed out that electrical engineers were apt to draw unfair inferences from the slight results which have often followed accidental electrical contact, and showed that a current which might be harmless to A might have very serious results for B. These different results would be probably owing to the greater moisture of the skin in the one case than in the other; and a table is given showing to what an extent skin-moisture must be taken into account. This table showed that with a continuous current the resistance of the skin when moist is reduced to about one-third of what it is when dry, and when the skin is actually wet the resistance is reduced to one-fourth. In the same paper allusion was made to a recent American invention, the object of which is to render painless the operation of tooth-extraction, and the authors stated that their experiments showed that it does fully accomplish the elimination of pain. Unfortunately, they did not further describe it, but it is called the 'Dental Vibrator.'

The completion of the telephone line between London and Paris may certainly be regarded as a great scientific triumph. The first proposal for this new means of communication between the two countries came from the French government; but the plans and specifications were made out by the chief electrician to the British Post-office, Mr W. P. Preece, F.R.S. The line works so perfectly that there is no need to speak directly against the transmitter, and in all respects the sounds are far clearer and freer from extraneous noises than are the local lines to which most business men are accustomed. As a proof of this freedom from induction noises, it may be stated that a watch at Dover can be distinctly heard ticking in London. The public are allowed to use the new telephone line for three minutes' conversation on payment of ten francs (8s. 4d.). A clockwork arrangement records the time during conversation, and shuts off all communication at the end of the allotted three minutes. Payment of another fee will secure another three minutes' talk; but no person will be allowed to enjoy more than six minutes' conversation on any one occasion.

The mania for Protection seems to be pushed to a ridiculous extreme just now in the United States, if we may believe the report that a telephone cable passing through the tunnel under the St Clair River from Canada has been made to pay duty. It is also said on good authority that the steel cylinder used in constructing this tunnel was subjected to a similar payment.

An American lady-naturalist contradicts the general opinion that moles are entirely carnivorous, are exceedingly rapacious, and will die if left longer than eight or ten hours without food. She shut a mole up in a well-ventilated box, and offered it vegetable food, which it at first refused; but after sixteen hours' fasting, it was induced to eat bread and milk. Coarse oatmeal soaked well in milk, but uncooked, it ate ravenously. When released, the animal tore at the carpet and upholstery of the room in the hope of finding something into which it could burrow, eventually taking possession of a woollen mitten which was thrown to it, and into the thumb of which it thrust its head. It lived in this way for three days, coming out of the mitten occasionally to feed on its oatmeal.

A new trade, which promises to reach extensive proportions, has sprung up lately in the importation of butter from distant New Zealand. The butter is found to keep perfectly sweet if packed in quantities of fifty-six pounds and upwards, and kept at a temperature not greater than forty-five degrees. Many factories are concerned in the production of this butter from grass-fed milk with the most improved appliances, and under scientific supervision, the result being that the product fetches the high wholesale price of one shilling per pound. When we are suffering under the rigours of winter, it is summer-time at New Zealand, and the new butter can therefore be shipped so as to arrive here at a time of comparative scarcity. The colonial authorities are said to be doing their best to develop an industry which will doubtless prove to be of much benefit to producers and consumers alike.

The *New York Tribune* lately described the methods of night-signalling which are adopted in the American navy, and which differ somewhat from the means employed in this country. In one method three sixteen-candle electric lights are used, one being white, one green, and the other red. These three lamps are hung in the rigging several feet apart, but in a vertical line, and are governed by keys, which shut off the light from each at the will of the operator. The green light indicates a dash, and the red one answers to a dot, so that words may be readily spelt out by means of the Morse alphabet. The use of the white light is not indicated; but probably it is employed as an answering signal to show that similar communications from another ship or from the shore are understood. Another method employed is to use the search-light for flashing long or short gleams of light upon the clouds overhead. This latter plan would be available for far greater distances than the coloured-lamp system, which, indeed, is limited to an area of about three miles.

A year or two back, much interest was aroused by the introduction of smokeless powder for military purposes as a rival to that compound of 'villainous saltpetre' which had been up to that time universally employed. The art of manufacturing these new powders has developed to such an extent that they are now applied to various purposes other than warfare. Sportsmen speak highly of their advantages in reducing recoil to a minimum, with an almost total absence of fouling the barrel of the gun, and giving greater penetration than black gunpowder. Riflemen also testify to the good scores which they can make with the new ammunition. For blasting purposes, a special powder is made, which, in addition to absence of smoke, has the further advantage of giving off no poisonous fumes during explosion. This latter quality of the new compound is also felt as a great advantage in confined rifle galleries where practice with a Morris tube is carried on. The Smokeless Powder Company of London are now manufacturing ammunition to suit either sporting guns or rifles. In outward appearance the new

powders bear very little resemblance to the explosive agent which in a great measure they seem destined to supplant.

In a recent paper dealing with that most lasting form of decoration known as mosaic-work, and which has to some extent been revived of late years, Mr T. R. Spence explained one method by which the designs are worked out, and the tiny pieces of glass, marble, or stone fixed in their places. From a small design in colour, a full-sized cartoon is made, and from this last, cardboard sections of the design of a convenient size are obtained by means of tracing. With his eye on the original design, the operator now glues the *tesseræ*, previously cut to proper sizes, on one of these cardboards, until the whole of its surface, perhaps twenty inches square, is filled up. When each part of the design has been thus treated, these cardboard pieces of patchwork are laid on the floor or wall on a layer of wet cement, face downwards, and pressed well into position. When the cement has had time to set, the cardboard temporary support is washed off, the spaces between the *tesseræ* are filled up with cement, and finally the whole is rubbed level and smoothed.

Serpollet's steam-carriage and its trials in the streets of Paris have lately formed the subject of comments in the French press, and one journal, *La Nature*, gives an illustration (taken from a photograph) of its outward appearance. It resembles a phaeton without shafts, the motor being almost entirely hidden in the body of the vehicle. The chief feature in this new form of steam-carriage is the boiler, which consists of a small metallic tube maintained at such a heat that when a small quantity of water is injected into it, steam is immediately generated in sufficient quantity to start the engine. Thus, there is no reserve of steam—it is made as required, and explosion is impossible. The trials of this novel carriage have been so successful that the police have authorised its use in the Paris thoroughfares, provided that the speed is kept below ten miles an hour. It may be noted that the peculiar construction of the boiler allows for extra pressure to be exerted, so as to overcome obstacles or to ascend hills. This is provided for by a hand-pump by which an extra injection of water may be made when required, and which seems equivalent to harnessing an extra horse to an ordinary vehicle in a like emergency.

A writer in *Nature Notes*, the Selborne Society's Magazine, calls renewed attention to the diminished number of our wild-birds since the senseless practice of using them for purposes of personal adornment became common in civilised England. The beautiful kingfisher is now almost extinct in what used to be his favourite haunts, justifying the prophecy of the late Frank Buckland, who, twelve years ago, said to the writer of the paper referred to, 'The ladies have taken to the kingfishers, and they'll have to go.' It is the same with the goldfinches and many other birds who are unfortunate enough to wear bright plumage. Even the swallows are not exempt from slaughter, so that their bodies may be stuck in bonnets and hats. Many appeals have been made through the press to stop this war against our birds, and we believe a Ladies' Society was actually formed to protest against it. But the evil is as rampant as ever. If all fathers would insist on their daughters renouncing a badge which to thoughtful men is so uncomplimentary to the wearer, something would be done to stop the iniquitous traffic in dead birds.

To facilitate the lowering of ships' boats in case of accident, a 'combined chock and gripe arrangement' has been patented by Mr W. Bell, manager, Camperdown Shipyard, Dundee. Mr Bell's arrangement enables a boat to be more securely fastened down into the chocks, and it can be instantaneously released ready for lowering by one man, who has merely to move a small lever, without touching the 'tackles,' 'gripes,' or 'chocks.' To further increase the rapidity in lowering the boats, patent lowering and disengaging gear has also been designed and patented by the same gentleman. By it a boat can be safely lowered into the water by one man. All possibility of one end of the boat being lowered before the other is averted by both ropes being wound on the same barrel. The windlass is situated at a convenient point between the davits, and by means of a powerful brake one man can let down or haul up the lifeboat with ease and safety. Experiments have recently been made with the 'chock and gripe' arrangement in presence of an officer of the Board of Trade with very satisfactory results.

PLENTY OF TIME.

Plenty of Time—Plenty of Time!
O what a foolish and treacherous chime!
With so much to see, and so much to be taught,
And the battle with evil each day to be fought;
With wonders above us, beneath, and around,
Which sages are seeking to mark and expound;
With work to be done in our fast passing prime,
Can ever there be for us 'plenty of time?'

Our schooling at most lasts a few score of years,
Spent in sunshine and shadow, in smiles or in tears;
While none are quite equal, howe'er they be classed,
And judgments too often are faultily passed.
'Twixt Eternity past and its future to stand
Like a child sea-surrounded on one speck of land,
There to work out the duties that make life sublime,
Oh, surely there cannot be 'plenty of time!'

CAMILLA CROSLAND.

*** TO CONTRIBUTORS.

1*st*. All communications should be addressed to the 'Editor, 339 High Street, Edinburgh.'

2*d*. For its return in case of ineligibility, postage-stamps should accompany every manuscript.

3*d*. To secure their safe return if ineligible, ALL MANUSCRIPTS, whether accompanied by a letter of advice or otherwise, *should have the writer's Name and Address written upon them* IN FULL.

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